REL SOUTHWEST Regional Educational Laboratory Southwest

REL Southwest Ask A REL Response

August 2019

Question:

What is the effect of extended learning time programs on students' academic, behavioral, and social-emotional outcomes?

Response:

Thank you for the question you submitted to our REL Reference Desk. We have prepared the following memo with research references to help answer your question. For each reference, we provide an abstract, excerpt, or summary written by the study's author or publisher. Following an established Regional Educational Laboratory (REL) Southwest research protocol, we conducted a search for research reports as well as descriptive study articles on the effect of extended learning programs on students' academic, behavioral, and social-emotional outcomes.

We have not evaluated the quality of references and the resources provided in this response. We offer them only for your reference. Also, we searched the references in the response from the most commonly used resources of research, but they are not comprehensive, and other relevant references and resources may exist. References provided are listed in alphabetical order, not necessarily in order of relevance. We do not include sources that are not freely available to the requestor.

Research References

Early Childhood Extended Learning Time Programs

Carnes, G., & Albrecht, N. (2007). Academic and social-emotional effects of full-day kindergarten: The benefits of time. *Emporia State Research Studies, 43*(2), 64–72. Retrieved from https://esirc.emporia.edu/bitstream/handle/123456789/391/201.3.pdf

From the abstract: "This study used a mixed-methods approach to examine academic and social-emotional effects of full-day kindergarten. Quantitative data analysis indicated a significant difference in academic achievement for children in full-day versus half-day kindergarten. Personal perspectives from teachers, administrators, and parents provided insight into how an extension of the school day promoted that achievement. Those perspectives also helped paint a picture of students' social-emotional development and other effects of the new program that supports previous research on full-day kindergarten.

Results suggest that students in a small rural community benefited both academically and developmentally from the extended kindergarten experience."

Lee, V. E., Burkam, D. T., Ready, D. D., Honigman, J., & Meisels, S. J. (2006). Full-day versus half-day kindergarten: In which program do children learn more? *American Journal of Education, 112*(2), 163–208. https://eric.ed.gov/?id=EJ750264. Full text retrieved from https://pdfs.semanticscholar.org/1ef7/2159ac1b60bfa8e12b463245a5261770cb8c.pdf?_ga=2.145168508.975275395.1566576783-120417644.1566576783

From the ERIC abstract: "Do children learn more in full-day kindergartens than half-day programs? If full-day kindergarten increases learning, are kindergartners in some schools particularly advantaged by their full-day experience? We address these questions with a nationally representative sample of over 8,000 kindergartners and 500 U.S. public schools that participated in the Early Childhood Longitudinal Study-Kindergarten Cohort. More than half of kindergartners experience full-day programs, which are most commonly available to less-advantaged children. Using multilevel (HLM) methods, we show that children who attend schools that offer full-day programs learn more in literacy and mathematics than their half-day counterparts. We also explore differential effectiveness in some school settings."

REL Southwest NOTE: This report was reviewed by the What Works Clearinghouse (WWC). The review determined that the study does not meet WWC standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups do not satisfy the baseline equivalence requirement.

Li, W., Farkas, G., Duncan, G. J., Vandell, D. L., & Burchinal, M. (2013). *Effects of Head Start hours on children's cognitive, pre-academic, and behavioral outcomes: An instrumental variable analysis.* Paper presented at the Society for Research on Educational Effectiveness Spring 2013 Conference, Washington, District of Columbia. https://eric.ed.gov/?id=ED563041

From the ERIC abstract: "Children from low-income families benefit remarkably from exposure to compensatory education that began with Head Start in 1965 and aimed to improve school readiness skills by design. While empirical evidence has supported more instructional time in elementary and secondary schools for low-income students, little is known that whether increasing quantity of Head Start could also benefit low-income children. The authors' goal was to estimate the effect of Head Start hours on child development by examining: (1) Does the amount of daily exposure to Head Start impact cognitive, pre-academic, and social outcomes?; and (2) Does the impact vary by age? 4,442 applicants to 383 Head Start centers participated in the National Head Start Impact Study (HSIS). The results from the study showed significant positive effects of hours in center care experienced on the children's cognitive, language, and academic outcomes. Additionally, the results show that an additional hour per day spent in Head Start centers decreases problem behaviors of children in age-3 cohort, but results do not show significant effects for behavioral problems of age-4 cohort. Tables and figures are appended."

Milligan, C. (2012). Full-day kindergarten effects on later academic success. *SAGE Open, 2*(1). Retrieved from https://journals.sagepub.com/doi/pdf/10.1177/2158244012442677

From the abstract: "The purpose of this research was to investigate full-day kindergarten, as a means of improving later academic achievement. A total of 208 students who had continuous enrollment for three consecutive school years from a school district in southern California participated in the study. The sample contained 165 students who had attended the traditional half-day kindergarten program with 43 attending a hybrid all-day kindergarten program. All students were administered the California Standardized Testing and Reporting (STAR) assessment and the California Achievement Test 6th Edition (CAT 6) survey exams. Using stepwise multiple regression, several independent variables were introduced into the regression equation to obtain a Prediction Model of Student Success. The English language arts and math scores of the California STAR Assessment were used as the dependent variable separately. A significant model was not developed. Using an independent-sample T Test procedure, comparing the two groups, was also preformed revealing that there were no significant differences in students who attended the all-day kindergarten program and students who attended a traditional kindergarten program."

U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2013). *WWC review of the report: Summer school effects in a randomized field trial.* Washington, DC: U.S. Author. http://eric.ed.gov/?id=ED539276

From the ERIC abstract: "The study reviewed in this report examined the impact of a summer literacy program on kindergarten and first-grade students who were at moderate risk for reading difficulties in one Pacific Northwest school district. The study took place through a limited expansion of an existing summer program for high-risk students that was modified to include moderate-risk students. Study authors randomly assigned 49 kindergarten students (25 intervention, 24 comparison) and 51 first-grade students (26 intervention, 25 comparison) identified as moderate-risk to either an intervention group that was invited to participate in the summer reading program, or a comparison group that did not receive the intervention. The final analytic sample consisted of 46 kindergarten students (24 intervention, 22 comparison) and 47 first-grade students (23 intervention, 24 comparison). The study found, and the What Works Clearinghouse (WWC) confirmed, a statistically significant positive effect of the summer school intervention on student outcomes in the fall of the implementation year for students in both kindergarten (effect size on the alphabetic assessment = 0.69) and first grade (effect size on the reading fluency assessment = 0.61). The research described in this report meets WWC evidence standards without reservations. Appended are: (1) Study details; (2) Outcome Measures for each domain; and (3) Study findings for each domain. A glossary is included."

Elementary/Secondary Extended Learning Time Programs

Beesley, A. D., Fancsali, C., & Gulemetova, M. (2018). *Building mathematical identity after school: Year 1 of a cluster-randomized trial*. Paper presented at the Society for Research on Educational Effectiveness Spring 2018 Conference, Washington, District of Columbia. https://eric.ed.gov/?id=ED591600

From the ERIC abstract: "This paper describes a cluster-randomized trial of an after-school program intended to build mathematical identity among students in groups under-represented in science, technology, engineering and mathematics (STEM). Populations under-represented in STEM include women, persons with disabilities, African Americans, and Latino/as (NSF, 2011). U.S. jobs are growing most rapidly in areas that require STEM knowledge (National Academy of Sciences, 2010). However, over half of secondary students do not feel they need math outside of school, and they think that liking math is unpopular (Markow & Moore, 2001). If these students continue along this path, they will not be eligible for at least 75% of the jobs of the future (Fleming, 2012). Elementary-level experiences are thus important in attracting students to STEM. After-school programs may increase students' access to mathematical content and discourse and build identity as knowers/doers of mathematics (Cobb & Gresalfi, 2006). With some exceptions (Berry, 2008; Nasir, 2002), few previous studies examine identity motivation, and fewer yet study out-of-school experiences and identity motivation. The following research questions are addressed in this paper: (1) What is the effect of the after-school program on students' math identity, engagement, interest, and math achievement? (2) What is the relationship between math achievement and math engagement, interest, and identity in the after-school program? and (3) What elements of the program foster students' math identity, and through what mechanisms is this effect achieved? What are the best practices and lessons learned? This paper will present first-year findings from a randomized controlled trial (RCT) of an afterschool curriculum designed to improve students' math identity. Preliminary analyses indicate no impact on student outcomes and some impact on educator outcomes. Fall 2017 will include adjusted impact estimates and psychometric analyses of the math identity instruments."

Black, A. R., Somers, M.-A., Doolittle, F., Unterman, R., & Grossman, J. B. (2009). *The evaluation of enhanced academic instruction in after-school programs: Final report* (NCEE 2009–4077). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. http://eric.ed.gov/?id=ED506725

From the ERIC abstract: "The primary purpose of this study is to determine whether providing structured academic instruction in reading or math to students in grades two to five during their afterschool hours—instead of the less formal academic supports offered in regular after-school programs—improves their academic performance in the subject. This is the second and final report from the Evaluation of Enhanced Academic Instruction in After-School Programs—a two-year demonstration and random assignment evaluation of structured approaches to teaching math and reading in after-school settings. This report includes two parallel impact studies, a math program study ('Mathletics' developed by Harcourt School Publishers) and a reading program study ('Adventure Island' developed by the Success for All Foundation) in which students attending an afterschool program are assigned by lottery to either receive the structured academic programming or the afterschool programming regularly offered. For each academic program, the evaluation design allows for information about the one-year impact in the first and second years of operation as well as the two-year impact in which the program

was offered to students for two consecutive years. Data on after-school staff characteristics, program implementation, and student outcomes were collected in the first and second years in 27 centers (12 providing the reading program and 15 providing the math program). Key findings for the enhanced math program were: (1) One year of enhanced instruction produces positive and statistically significant impacts on student achievement; (2) Two years of the enhanced program produces no additional achievement benefit beyond the one-year impact; (3) There was program fidelity across both years of implementation; (4) Students in the enhanced program received math instruction that was more structured and intensive than regular after-school program students; and (5) No clear lessons emerge for program improvement or targeting the program in particular types of schools. Key findings for the enhanced reading program were: (1) The enhanced program has no impact on total reading test scores after one year of participation; (2) Two years of participation produces significantly fewer gains in reading achievement for students in the enhanced program group; (3) Though the reading program was staffed and supported as planned, implementation issues—especially related to the pacing of lessons—occurred in both years; (4) Students in the enhanced program received reading instruction that was more structured and intensive than regular after-school program students; and (5) No systematic relationship exists between center-level impacts and program implementation or the local school context."

REL Southwest Note: This report meets WWC standards without reservations.

Borman, G. D., & Dowling, N. M. (2006). Longitudinal achievement effects of multiyear summer school: Evidence from the Teach Baltimore randomized field trial. Educational *Evaluation and Policy Analysis, 28*(1), 25–48. http://eric.ed.gov/?id=EJ750483. Full text retrieved from https://www.researchgate.net/publication/249795622

From the ERIC abstract: "Employing a randomized field trial, this 3-year study explored the effects of a multiyear summer school program in preventing the cumulative effect of summer learning losses and promoting longitudinal achievement growth, for a total treatment group of 438 students from high-poverty schools. Longitudinal outcomes for the participants were contrasted to those for 248 children randomized into a no-treatment control condition. Multilevel growth models revealed no intention-to-treat effects of assignment to the multiyear summer school program. However, student attendance patterns at the voluntary program were variable across the 3 years that the intervention was offered. Maximum likelihood mixture models, which estimated the effects of the treatment for compliers, revealed statistically significant effects on learning across all three literacy domains tested for those students who attended the Summer Academy at an above average rate across two or more of the three summers that it was offered. Relative to their control-group counterparts, treatment compliers held advantages of 40% to 50% of one grade level on the final posttests."

REL Southwest Note: This report meets WWC standards with reservations.

Checkoway, A., Gamse, B., Velez, M., & Linkow, T. (2013). *Evaluation of the Massachusetts Expanded Learning Time (ELT) initiative: Final study findings*.

Society for Research on Educational Effectiveness Spring 2013 Conference, Washington, District of Columbia. https://eric.ed.gov/?id=ED563107

From the ERIC abstract: "The Massachusetts Expanded Learning Time (ELT) initiative provides grants to selected schools to redesign their schedules by adding 300-plus instructional hours to the school year to improve outcomes, broaden enrichment opportunities, and provide teachers with more planning and professional development time. The Massachusetts Department of Elementary and Secondary Education (ESE) and Abt Associates, with grant funding from the U.S. Department of Education's Institute for Education Sciences (IES), completed a five year study of the ELT initiative to examine three primary research questions: (1) How has expanded learning time been implemented in schools that receive ELT grants?; (2) What are the outcomes of expanded learning time for schools, students, and teachers?; and (3) What is the relationship between implementation and outcomes? This study included 24 elementary, middle, and K-8 ELT schools that were funded by the state and 25 matched comparison schools. As random assignment of schools or students to ELT was not feasible, this study's impact analysis relies upon a strong longitudinal quasi-experimental design: a comparative interrupted time-series approach that leverages pre-program data and data from matched comparison schools to produce estimated effects representing differences between ELT and comparison schools beyond what one might expect given pre-program measures and other secular initiatives affecting all schools. Analyses of non-academic outcomes rely on cross-sectional survey data and use multi-level models that produce estimates of differences between ELT and comparison schools to approximate what would have happened in the absence of ELT. Each year, longitudinal student-level MCAS and other extant data for both ELT and matched comparison schools are analyzed. One of the study's key contributions was to integrate implementation and outcomes data using an index based on principles of effective ELT operation; this implementation index provides a measure of fidelity that can be used both to understand school-level implementation and to explore relationships between implementation and outcomes. Findings from the study reveal the following: (1) More ELT teachers were satisfied with time available for instruction and planning, and reported that they spend sufficient instructional time with students. Fewer ELT teachers reported that student academic performance and homework completion rates were problem areas; (2) More teachers in ELT schools reported that teacher and staff fatigue, as well as student fatigue, were problems in their respective schools; (3) Generally, there were no statistically significant effects of ELT on student achievement; (4) Descriptive analysis linking the level of implementation in ELT schools and student achievement outcomes indicate no clear patterns or meaningful relationships; (5) Exploratory analysis of differential effects of ELT in higher- versus lower-implementing schools indicates minimal heterogeneity in the effect by the level of ELT implementation; and (6) The school reform landscape is dynamic; each year, more schools (outside of this ELT initiative) appear to be expanding the amount of time in their school year as well as implementing reforms consistent with the core ELT components."

Folsom, J. S., Petscher, Y., Osborne-Lampkin, L., Cooley, S., Herrera, S., Partridge, M., & Smith, K. (2016). *School reading performance and the extended school day policy in Florida* (REL 2016–141). Washington, DC: U.S. Department of Education, Institute of

Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. https://eric.ed.gov/?id=ED566657

From the ERIC abstract: "Florida law requires the 100 lowest performing elementary schools in reading to extend the school day by one hour to provide supplemental reading instruction. This study found that those schools were smaller than other elementary schools and served a higher proportion of racial/ethnic minority students and students eligible for the school lunch program. The lowest performing schools reported increasing the number of minutes of reading instruction provided to students, increasing staff, and providing instruction in the extra hour that differed from instruction during the rest of the day. When growth in performance is measured, initially low scores generally rise, even in the absence of an intervention, because of natural year-to-year variations. While average school reading performance improved among the lowest performing schools, the increase did not exceed the small year-to-year variations expected when measuring initially low student performance. Appended are: (1) Supplemental tables of school characteristics, school reading performance, and survey responses; (2) Florida Department of Education 100 lowest performing elementary schools in reading extended school day reading instruction plans compliance survey; (3) Data and methodology; and (4) Supplemental statistical tests of significance for school characteristics and implementation of extended school day policy."

Furrer, C. J., Magnuson, L., & Suggs, J. W. (2012). Getting them there, keeping them there: Benefits of an extended school day program for high school students. *Journal of Education for Students Placed at Risk, 17*(3), 149–164. https://eric.ed.gov/?id=EJ975180. Full text retrieved from https://www.researchgate.net/publication/239795379

From the ERIC abstract: "Over a decade of research has demonstrated the positive effects of extended school day programs on various elementary and middle school student outcomes, both in the short and long term. The efficacy of extended school day programs in promoting academic outcomes among high school students is less well understood. This study contributes to the existing literature by examining school attendance, credit attainment, and standardized reading and math scores in a group of students at risk of academic failure who participated in extended school day programming. The study compared their outcomes to those of a group of demographically similar students who did not participate in the program. The extended school day program is provided within a full-service Schools Uniting Neighborhoods (SUN) Community School (CS) in the Portland, Oregon metropolitan area. Results suggest an advantage for SUN students in terms of better school attendance and earning credits toward graduation, but not in terms of standardized test scores. Implications for future research and extended school day policy are discussed."

Goldschmidt, P., Huang, D., & Chinen, M. (2007). *The long-term effects of afterschool programming on educational adjustment and juvenile crime: A study of the L.A.'s BEST afterschool program.* Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing (CRESST), University of California, Los Angeles.

Retrieved from http://lasbest.org/wp-content/uploads/2018/05/CRESST-2007-LASBEST_DOJ_Final-Report.pdf

From the abstract: "Widespread interest in the impact of after-school programs on youth development has increased dramatically over the past several years. Although research has investigated the short-term impact of programs on academic and social student development, there is limited research on the long-term effectiveness of after-school programs in lowering rates of juvenile crime. This study bridges that research gap and presents results from an evaluation of the effectiveness of LA's BEST—the largest urbanbased, after-school program in Los Angeles County—on long-term academic achievement growth and juvenile crime. This research tracked the academic and juvenile crime histories for a sample of 6,000 students, 2,000 students participating in LA's BEST and 4,000 matched control students not participating in LA' s BEST. We used multilevel propensity scores to match control to treatment students and applied multilevel longitudinal models and multilevel survival analyses methods to analyze the data. Results indicate that students' engagement in the program is a strong mediating factor of program effectiveness. The key element of positive program impact is student engagement, as indicated by a medium to high average monthly attendance, and by significant adult contact of at least one additional adult (volunteer) per day. Student participants, who attended sites with a higher average of adult volunteerism, demonstrate modest achievement gains compared to students who did not participate in LA's BEST. Likewise, students who consistently attended LA's BEST demonstrate a substantively significant reduction in the juvenile crime hazard compared to participants with inconsistent attendance, and compared to students in the control group. Benefit-cost analyses indicate that results are sensitive to assumptions regarding the value of avoided costs from prevented crimes."

REL Southwest Note: This report meets WWC standards with reservations.

Grolnick, W. S., Farkas, M. S., Sohmer, R., Michaels, S., & Valsiner, J. (2007). Facilitating motivation in young adolescents: Effects of an after-school program. *Journal of Applied Developmental Psychology, 28*(4), 332–344. http://eric.ed.gov/?id=EJ769421. Full text retrieved from https://selfdeterminationtheory.org/SDT/documents/2007_GrolnickFarkasSohmerMichaels_JADP.pdf

From the ERIC abstract: "This study examined the effects of a motivationally facilitative after-school program on 7th grade students' autonomous motivation, learning goals, school engagement, and performance in science class. Pairs of students were individually matched on sex, race/ethnicity, free lunch status, and science grades and each member was randomly assigned to either a 15 week, after-school program or a control group. Students (N = 90) completed questionnaires regarding their motivation, and engagement before and after the program. Science, math, social studies, and English teachers rated students' levels of classroom engagement. Students participating in the Investigators' Club increased in learning goals, engagement in school and in science class, and science grades, and decreased in performance goals relative to the controls. Effects of the

program as well as drop-out and completer information, are discussed in terms of the goal of facilitating motivation in disadvantaged middle school students."

James-Burdumy, S., Dynarski, M., Moore, M., Deke, J., Mansfield, W., & Pistorino, C. (2005). *When schools stay open late: The national evaluation of the 21st Century Community Learning Centers program: Final report.* Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. http://eric.ed.gov/?id=ED485162

From the ERIC abstract: The 21st Century Community Learning Centers program has supported after-school programs since 1998. Research on the effects of after-school programs has been inconclusive, leading to an ongoing debate about the effects of after-school programs. To examine the implementation of the 21st Century Community Learning Centers after-school program and assess its impacts on students. Earlier reports from this study presented findings based on two school years of data for middle school students and one school year of data for elementary school students. Key impact findings from the first report include no improvement in homework completion, limited effects on academic outcomes, no reduction in self-care, no improvements in safety and behavior, higher levels of parental involvement for the treatment group relative to the control group, and few effects on developmental outcomes. Key impact findings from the second report include higher levels of supervision by adults for treatment-group students relative to control-group students, lower levels of supervision by siblings for treatment-group students relative to control-group students, no reduction in self-care, few impacts on academic outcomes, improved feelings of safety after school for elementary students in the treatment group relative to students in the control group, mixed evidence on negative behavior for middle school students, some impacts on parents of elementary students, and few impacts on developmental outcomes. The purpose of the current report is to present impact analyses based on two years of follow-up data for elementary students."

Kidron, Y., & Lindsay, J. (2015). *Stated briefly: What does the research say about increased learning time and student outcomes?* (REL 2015-061). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Appalachia. https://eric.ed.gov/?id=ED547261

From the ERIC abstract: "REL Appalachia conducted a systematic review of the research evidence on the effects of increased learning time. After screening more than 7,000 studies, REL Appalachia identified 30 that met the most rigorous standards for research. A review of those 30 studies found that increased learning time does not always produce positive results. However, some forms of instruction tailored to the needs of specific types of students were found to improve their circumstances. Findings suggest that the impacts of these programs depend on the settings, implementation features, and types of students targeted. This 'Stated Briefly' report is a companion piece that summarizes the results of another report entitled 'The effects of increased learning time on students'

academic and nonacademic outcomes,' released on July 9, 2014. [For the companion report, REL 2014-015, see ED545233.]"

Langberg, J. M., Epstein, J. N., Urbanowicz, C. M., Simon, J. O., & Graham, A. J. (2008). Efficacy of an organization skills intervention to improve the academic functioning of students with attention-deficit/hyperactivity disorder. *School Psychology Quarterly, 23*(3), 407–417. http://eric.ed.gov/?id=EJ811150. Full-text retrieved from https://www.researchgate.net/publication/232501013

From the ERIC abstract: "Children with attention-deficit/hyperactivity disorder (ADHD) exhibit significant academic impairments, as evidenced by poor academic achievement, grade retention, and school dropout. Deficits in organization skills may contribute to these academic impairments, as children with ADHD frequently lose assignments, misplace their completed work, and have difficulty planning for tests. The present study examined the pilot efficacy of an 8-week organization skills intervention for children with ADHD. Thirty-seven children were randomly assigned to receive the intervention immediately or to a wait-list control. Participants made significant improvements in organization and homework management skills during the intervention and these gains were maintained at 8-week follow-up. Parents of children in the intervention group reported decreased homework problems. Children in the intervention group also demonstrated pre-post gains on teacher ratings of academic impairment and GPA. This study suggests that targeted academic skills interventions have the potential to improve overall academic performance among children with ADHD."

Organizations to Consult

Boston Public School's Expanded Learning Time – https://www.bostonpublicschools.org/domain/1630

From the website: "Expanded Learning Time (ELT) is any time beyond the traditional school day that is used to expand options for high-quality learning. ELT occurs in many different forms, but the most common in BPS are Extended Learning Time (Lengthening the School Day), Before and After School Programs, Summer Learning, and Vacation Week Programs. These programs help to create more time for enrichment and targeted learning, supporting the goal of closing the achievement and opportunity gap for BPS students.

The Office of Expanded Learning Time oversees grants and District initiatives that support ELT. We build a web of support for all students to access year round learning opportunities, thinking beyond the traditional idea of school."

The National Association for Year-Round Education – http://www.nayre.org/

From the website: "The National Association for Year-Round Education promotes the concept of year-round education by providing leadership and service to individuals and

organizations on all aspects of time and learning. As the chief repository research and literature related to best practice, it serves as a clearinghouse for information on year-round education (YRE) and the balanced school calendar. The association encourages research, produces publications, provides consultants to schools and districts, and provides the most up-to-date information available to educators and community members."

Methods

Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

- [("extended learning time") OR ("extended instructional time") OR ("extended day") AND ("outcomes")]
- Extended learning time
- Instructional time
- Extended day
- Effects of extended day
- Effects of increased learning time

Databases and Resources

We searched ERIC for relevant, peer-reviewed research references. ERIC is a free online library of more than 1.7 million citations of education research sponsored by the Institute of Education Sciences (IES). Additionally, we searched the What Works Clearinghouse.

Reference Search and Selection Criteria

When we were searching and reviewing resources, we considered the following criteria:

- *Date of the publication:* References and resources published from 2004 to present, were included in the search and review.
- *Search priorities of reference sources:* Search priority is given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, academic databases, including ERIC, EBSCO databases, JSTOR database, PsychInfo, PsychArticle, and Google Scholar.
- *Methodology:* The following methodological priorities/considerations were given in the review and selection of the references: (a) study types—randomized control trials, quasi-experiments, correlational studies, descriptive data analyses, literature reviews, mixed methods analyses, and so forth; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected, and so forth), study duration, and so forth; and (c) limitations, generalizability of the findings and conclusions, and so forth.

This memorandum is one in a series of quick-turnaround responses to specific questions posed by stakeholders in the Southwest Region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), which is served by the Regional Educational Laboratory (REL) Southwest at AIR. This memorandum was prepared by REL Southwest under a contract with the U.S. Department of Education's Institute of Education Sciences (IES), Contract ED-IES-91990018C0002, administered by AIR. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.